

**BlueLine**

*Instruments for Electrophoresis*

## INSTRUCTION MANUAL

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### **DIAS-II**

**Digital Imaging and Analysis System II**



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### WARNING

The Digital Imaging and Analysis System II (DIAS-II) is designed to give long service and reproducible results in your laboratory. A few moments spent reading these instructions will ensure that your expectations are reflected in the successful use of the apparatus. Please read the entire operator's manual thoroughly before operating this unit.

First check with the help of the packing list that the system has been received complete and undamaged following shipment and check that all components and accessories are present. Any damages or missing parts must be notified to **SERVA Electrophoresis GmbH Heidelberg** resp. to the responsible distributor immediately. **SERVA Electrophoresis GmbH** cannot accept responsibility for goods returned without prior notification.

**Warranty is 12 months from the date of delivery.**

## 1. Packing list

**DIAS-II**

**Cat.-No.: DIAS-II**

No. of items	Description	Cat.-No.
1	Cabinet incl. Power cable	DIAS-II
1	Canon digital camera incl. power adaptor	
1	CD DSR Remote Pro for Windows incl. manual	DSR-RP01
1	CD Gelscan 6.0 software incl. manual	GS-V60
1	Manual for DIAS-II	

## 2. Description system components

**Note:** For operating the digital camera you need a laptop with USB connection, which is not included in the delivery.

### Canon Digital Camera

- For technical details please refer to the instruction manual of the digital camera.

### Darkroom cabinet

- solid design, made from steel
- small footprint (50 x 40 x 50 cm)
- large sized doors plus drawer, easy handling of gels
- UV filter and filter holder included

### GelScan 6.0 software pack for 1D analysis

- comparison of expression patterns of different gels
- quantification of bands
- determination of molecular weight
- determination of isoelectric point
- automatic band detection
- individual edition of bands
- automatic background subtraction
- gel-management-tool
- GLP-conform incl. read-out of embedded tiff-tags
- database for pictures, projects and results
- automatic backup of all data
- export into MS Word™, MS Excel™, MS PowerPoint™
- **GelScript 1.1** included for easy inscription of images

DIAS-II system can be combined optionally with

Description	Cat.-No.
UV/WL-top light, wave length 254 nm	14-EL-254
UV/WL-top light, wave length 365 nm	14-EL-365
WL-top light	14-EL-WL
UV transilluminator	inquire
UV/WL converter plate	inquire
PC Optiflex 330MT	inquire
Mitsubishi Videoprinter P-93 DW	inquire

### 3. Installation of DIAS-II system

**Important note:** Responsibility will not be accepted by SERVA Electrophoresis GmbH for damage resulting from misuse and violation of the following conditions.

#### 3.1. Installation of transilluminator



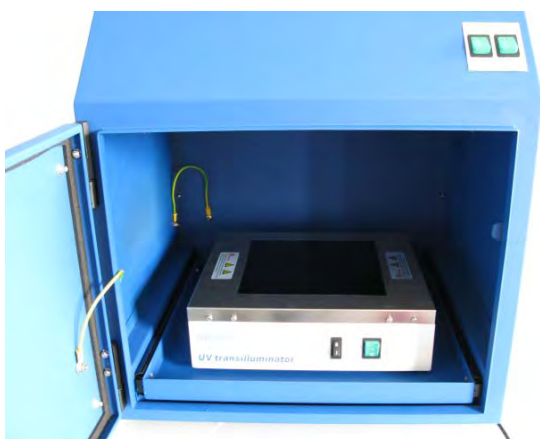
1. Place the darkroom cabinet on an even surface.
2. Plug the power plug into the mains connection on the back side of the cabinet and connect the cable with the electrical socket.



3. Open the door by pressing the black door opener.
4. Pull out the drawer and place the transilluminator on top.
5. Connect the power cable of the transilluminator with the electrical socket at the top right of the cabinet. The connectors for the UV/WL-top lights are located here as well.



6. Slide in the drawer and close the door.



7. With the door closed, you can turn on the UV transilluminator with the switch on the top right of the cabinet. Make sure that the power switch on the back side of the cabinet and the main switch at the UV transilluminator are turned on.



### 3.2. Installation of the camera

Check if camera with accessories and AC adapter kit have been received complete and undamaged. Please read and follow the manuals of camera and AC adapter kit to ensure correct operation. Strictly observe the safety information.

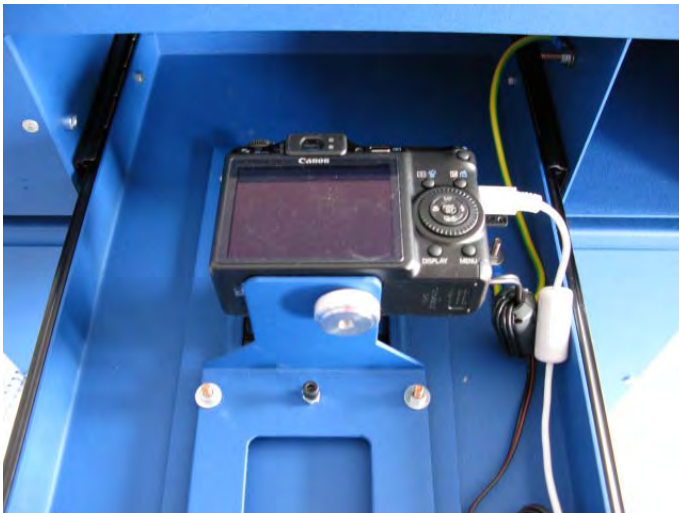
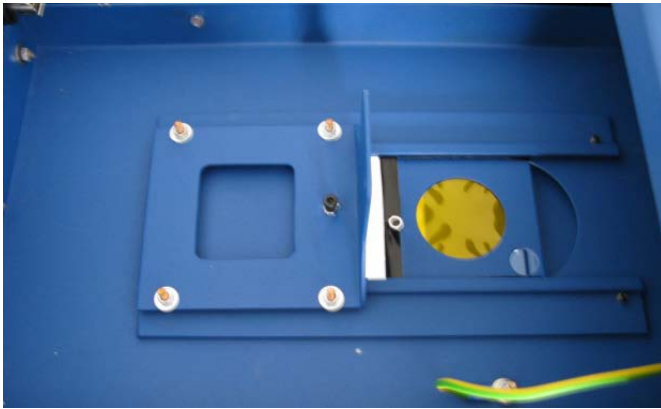
1. Plug the power cable into the power adaptor.
2. Connect the power adaptor to the DC IN terminal of the DC coppler.



3. Open the battery compartment and insert the DC coppler.
4. You can now connect the camera with the power cable with an electrical socket and turn on. Make the basic settings of the camera like language, date, time etc. For further information about camera handling please consult the Canon manual.
5. Remove the screws on the back side of the cabinet and pull out the drawer.



6. For the installation remove once again the power cable from the power adaptor. Connect the USB cable with the camera's DIGITAL terminal. Place the camera on the camera retainer over the UV filter and screw it tight.



7. Guide the power cable of the power adaptor through the opening on the back side of the cabinet and fix it with the hook.





8. Connect the power cable with the power adaptor and the USB cable with the USB connection of the cabinet. Switch on the camera. Close the drawer and screw it tight.



9.

### 3.3. Taking gel pictures

The camera is controlled via PC.

**Important:** Before you connect the camera with the PC, you have to install the DSR Remote Pro for Windows on your PC. Please follow the installation guide in the manual and see also the Quick Installation Guide (section 4.1.). Newer cameras like the Canon EOS 1100 D don't require drivers to be downloaded for Windows™ XP, Windows™ Vista or Windows™ 7.

Connect now the USB cable of the PC with the USB connection on the back side of the cabinet.

Take pictures of EtBr-, SybrGreen- etc. stained gels with UV-Filter and of protein gels etc. without UV-Filter. To remove the UV-Filter just push it back.



## 4. Quick Installation Guide

### 4.1. DSR Remote Pro for Windows

To install DSR Remote Pro for Windows simply run the setup program and follow the on-screen instructions. DSR Remote Pro can be uninstalled using the standard Windows "Add/Remove Programs" dialog available from "Control Panel".

In order to be able to connect to the camera you must also install the Canon USB or WIA drivers from the CD that came with your camera. The latest Canon USB drivers can also be downloaded from <http://consumer.usa.canon.com>

To register DSR Remote Pro for Windows run the application and click on the "Enter Key" button. When the dialog below is displayed enter your registration name and code exactly as it appears on your CD.



**For further information about installation and operating DSLR Remote Pro use the complete manual on the CD or as download at the SERVA website.**

## 4.2. GelScan 6.0 for Windows

GelScan 6.0 for Windows fully supports Windows 2000/XP/Vista.

**Gelscan 6.0** runs best under the **True Color** (1.6 mpix / 32 bit) setting and a resolution of **1280 x 1024** or higher (min. required **1024 x 765**).

To install GelScan 6.0 for Windows simply insert the CD and search the setup file in your explorer. Start the setup by clicking on the file twice and follow the on-screen instructions.

After the installation start **Gelscan 6.0** by clicking on the symbol twice.

To register GelScan 6.0 for Windows use the registration key on your CD. The dialogue appears once at the first start of the program.

When you used the demo version before, the full version can be activated directly in GelScan 6.0 by entering the registration key on your CD. You find the registration dialogue at **Info** and **Register Program**.

**For further information about installation and operating GelScan 6.0 use the complete manual on the CD or as download at the SERVAs website.**